

• a fourth step of determining an authenticated external apparatus as an apparatus to be responded to thereafter by the intelligent interconnecting device and causing the intelligent interconnecting device to judge whether or not this access is the first access, when it is judged in the third step that the authentication is given;

• a fifth step of causing the intelligent interconnecting device to extract and store a source IP address included in a packet which is received from the external apparatus in the authentication processing when this access of the external apparatus is judged to be the first access in the fourth step;

• a sixth step of determining the external apparatus as an apparatus not to be responded to thereafter by the intelligent interconnecting device when the external apparatus is judged not to be authenticated in the third step;

• a seventh step of causing the intelligent interconnecting device to judge whether or not the source IP address of the external apparatus giving the access thereto is identical with the stored source IP address when this access is judged not to be the first access in the first step;

• an eighth step of determining the external apparatus whose source IP address is judged to be identical with the stored source IP address as an apparatus to be responded to thereafter by the intelligent interconnecting device and causing the intelligent interconnecting device to process the steps beginning from the second step when the source IP address of the external apparatus is judged to be identical with the stored source IP address in the seventh step; and

• a ninth step of determining the external apparatus whose source IP address is judged to be nonidentical with the stored source IP address as an apparatus not to be responded to thereafter by the intelligent interconnecting device when the source IP address of the external apparatus is judged to be nonidentical with the stored source IP address in the seventh step.

【0011】 According to a fourth embodiment of the present invention, an intelligent interconnecting device having a function of repeating a packet which is transmitted/received between a plurality of computers and being structured to be controllable by an external apparatus based on a TCP/IP protocol is provided, the intelligent

interconnecting device comprising the following:

- a LAN trunk line interfacing section having an interface function with a LAN trunk line;

- a port interfacing section having an interface function with a terminal connected thereto;

- a storage section for storing a program and data therein, and

- a central controlling section for controlling operations of the LAN trunk line interfacing section, the port interfacing section, and the storage section, and wherein the central controlling section processes the following:

- when an access from an external apparatus is authenticated through execution of the TCP/IP protocol, to extract a source IP address included in a packet which is transmitted from the external apparatus and store it in the storage section;

- when an access from an external apparatus occurs thereafter, to judge whether or not a source IP address of the external apparatus giving the access is identical with the stored source IP address; and

- only when the source IP address is judged to be identical with the stored source IP address, to permit communication thereafter with the external apparatus having the source IP address identical